

Notice of Allowability

Application No.

10/666,473

Examiner

Stephen G. Sherman

Applicant(s)

MAGEE ET AL.

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed the 6 April 2006.
2. ☒ The allowed claim(s) is/are 1-9 and 16-28.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kyle Eppele on 1 February 2007.

2. The application has been amended as follows:

Please amend claim 1 as follows:

1. An information processing system, comprising:
 - a symbol generator for receiving input data and creating a display list containing drawing instructions:
 - a graphics engine for receiving the display list containing drawing instructions and producing a pixel data stream;
 - a color detector for receiving the pixel data stream and passing red pixel data over a red path, green pixel data over a green path, and blue pixel data over a blue path;

Art Unit: 2629

a display for receiving only the red pixel data and the green pixel data and displaying the red pixel data and green pixel data as symbols; and

a symbol monitor for receiving only the blue pixel data and the input data, for verifying that the symbols are placed in a proper location on the display, and for verifying the symbols are correct by comparing the blue pixel data and the input data.

Please amend claim 16 as follows:

16. A method of providing integrity checking for a pixilated display device, comprising the steps of:

receiving input data by a symbol generator;

generating drawing instructions with the symbol generator for a graphics engine;

outputting pixel data from the graphics engine to a color detector;

receiving, by a display, only red and green pixel data from the color detector;

displaying a symbol using the red and green pixel data;

receiving, by a symbol monitor, only the blue pixel data from the color detector;

receiving the input data by the symbol monitor; and

comparing the blue pixel data with the input data for verifying the symbols are correct.

Please amend claim 21 as follows:

21. A pixilated display system with symbol position monitoring, comprising:
- a a symbol generator receiving input data and creating a display list containing drawing instructions;
 - a graphics engine for receiving the display list containing drawing instructions and for producing a pixel data stream;
 - a color detector for receiving the pixel data stream and passing red pixel data and green pixel data and detecting and storing only blue pixel data for providing symbol location information and symbol identification;
 - a display for receiving only the red and green pixel data and displaying a symbol therefrom;
 - a symbol monitor coupled to ~~the~~ the color detector, the symbol monitor receiving the symbol location information and the symbol identification from the ~~the~~ color detector and the symbol monitor receiving the input data, computing derived input information based on the symbol location information and the symbol identification, and comparing the input data to derived input information.

3. The following is an examiner's statement of reasons for allowance:

The primary reasons for allowance are that the claim recites of "a display for receiving **only** the red pixel data and the green pixel data" and of "receiving **only** the blue pixel data and the input data, for verifying that the symbols are places in a proper

location on the display,” which are not found singularly or in combination within the prior art.

The closest prior art references are Hedrick (US 6,693,558) and Naimer et al. (US 2004/0046712). Hedrick discloses a flat panel display system for an aircraft in which a comparator processor is used for integrity checking, and that the comparator processor uses red, green and blue pixel data, and does not teach of only using the red and green for display while using only the blue for comparison. Naimer et al. disclose of a display generation system in which error detection processing is performed to determine whether any one the graphical information are erroneous, however, does not teach of only using the red and green for display while using only the blue for comparison.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

Art Unit: 2629

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS

2 February 2007

AMR A. AWAD
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read "Amr A. Awad", with a stylized flourish at the end.